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**Abstract**

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The present invention relates to a fibre grating filter optical waveguide device, comprising an optical fibre consisting essentially of silica, whereby said optical fibre has an area with a diffractive grating region and wherein said area with a diffractive grating region is covered with a material having a negative thermal expansion coefficient  $\alpha$  satisfying the following equation:

$$\alpha = - (dn_{\text{eff}}/dT) / n_{\text{eff}}$$

wherein  $dn_{\text{eff}} / dT$  is the thermo-optic coefficient of the fibre material and  $n_{\text{eff}}$  is the effective refractive index. Furthermore, the present invention provides a method of manufacturing such a device.

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